## Statistical Brief



**State Center for Health Statistics** 

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## **Underreporting of American Indian Race on North Carolina Death Certificates**

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## Introduction

Previous reports have shown that American Indian race is often not accurately reported on death certificates. For example, a 1999 study by Rosenberg, et al. indicated that death rates of American Indians are understated in official national publications by approximately 21 percent. The denominators of death rates, usually based on Census population data, tend to undercount minorities, which will inflate the death rates. Death certificates, used in the numerators, tend to undercount minorities, which will deflate the death rates. In the Rosenberg, et al. study, the **net** effect of these two opposing influences was that death **rates** for American Indians were understated by 21 percent.

The total American Indian/Alaska Native (AIAN) population of North Carolina according to the 2000 Census was 99,551 (1.2% of the state's total population), counting those who reported American Indian/Alaska Native alone as their race. Counting also those people who reported American Indian/Alaska Native in combination with one or more other races, the AIAN population of North Carolina was 131,736. Among the American Indians in North Carolina are eight state-recognized tribes. One of these tribes, the Eastern Band of Cherokee, is a federally-recognized tribe, the only tribe residing on a federal reservation, and the only tribe in North

Carolina served by the Indian Health Service of the United States Public Health Service.

The Indian Health Service (IHS) provides comprehensive health care services to members of federally-recognized American Indian tribes. To address the misclassification of American Indian race on death certificates, the IHS National Epidemiology Program has undertaken a comprehensive linkage of state-provided death certificates to IHS patient records. Goals of this project were to check the quality of the race data on death certificates and provide information for targeting state-level training for collection of better race data. The IHS has completed this death certificate linkage for about 15 states. This report presents the results for North Carolina.

## Methods

North Carolina submitted death certificate records to the IHS for all deaths occurring in North Carolina for the period 1990-2003, approximately 933,000 death records. Linkages between death certificates and IHS patient records were conducted by the IHS with probabilistic methods (LinkPlus software) using name, date of birth, gender, Social Security number, and other identifiers.

As mentioned above, only the Eastern Band of Cherokee in North Carolina is served by the Indian Health Service, so not all American Indian death certificates would be expected to match to the IHS patient records. Approximately 10 percent of American Indians in North Carolina are members of the



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